



**TECH
COGNIZANCE**

Editor in Chief : **Mr. Supratim Roy**

Chief Patron : **Dr. Dipankar Sarkar**

*Department of Electronics and
Communication Engineering*

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DREAM INSTITUTE OF TECHNOLOGY

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PREFACE

Becoming an Editor – in – chief for a magazine like “TECH - COGNIGENCE” was not a very easy job to perform. It has changed the way of thinking for me, my beloved colleagues and my students as well. The all-in-one platform for the new age ideas was quiet a tough job to do. The path breaking ideas of Dr. Dipankar Sarkar, our beloved principal was very tough but crystal clear to us and after a great time spent upon this magazine, we decided the parameters for this magazine.

This won't be a simple technical magazine. We are constantly trying our level best that the project ideas published in this magazine, must have some market sell ability. Our principal sir always encourages us as well as our students to do something innovative by which the students can make themselves employers not employees of some big multinational companies. With the help of this magazine, we are trying to enhance the employability of our state as well as our nation. So, this magazine can't be a simple technology-based magazine.

So, we are trying and we will be trying our level best to bloom this magazine as this magazine must play a broader aspect than just a simple bunch of ideas.



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Tech Cognizance

Half-Yearly News Letter for Department of
ELECTRONICS & COMMUNICATION ENGINEERING



This Issue

- P.1- About the Department
- P.2- Mission, Vision & Objective
- P.3- Achievements of the department
- P.4- Publication of the department
- P.5- Our Alumni Achievements

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering was established in the year 2006. Since its inception, it has been dedicated to providing dynamic and quality engineers to the industry and society. In the existing scenario of rapid and sophisticated development in the field of Electronics and Communications and its allied fields, the Department's intent and focus has always been to produce globally competitive and socially sensitized engineering graduates and to bring out quality research in the emerging areas of Electronics and Communication Engineering. The Department is committed of providing quality and contemporary education in the domain of Electronics and Communication Engineering through the latest curriculum, state-of-the-art laboratory facilities, collaborative ventures with industries, and effective teaching-learning practices. Considering the latest trends in industry and research, the department has recently revised the UG curriculum to enhance the employability of students.

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MISSION, VISION & OBJECTIVE OF THE DEPARTMENT

MISSION

- To develop the fundamental knowledge of electronics through innovative student centric learning process.
- To unravel global industrial challenges through latest technological tools and knowledge.
- To evaluate skills through strategic collaborative learnings and R&D activities.
- To provide entrepreneur assistance to create vibrant manpower for the nation.
- To develop laboratories meeting state-of-art technologies.

VISION

- To impart international standard education to aftermath inventions and research in the domain of Electronics and communication.

PROGRAMME OBJECTIVES

- Students will acquire knowledge to make them self-employable in Electronic Design, Telecom as well as IT sector and pursue higher studies in core and management sector. **(Preparation)**
- The core competency is in Device and Communication systems design and development that helps to meet ever changing industrial and societal demands. **(Core Competency)**
- Getting exposure in Data Science and computation, Machine Learning, AI, Mechatronics and Bio Electronics through collaborative learning. **(Breadth)**
- Students can engage themselves in research work, development of interpersonal skills and professional ethics (like obey safety norms & Maintain IEEE standard). **(Professionalism)**
- Students will inherit life-long learning attitude, adaptability, quality consciousness and punctuality which would facilitate them to get success in professional life. **(Attitudes)**



ACHIEVEMENTS OF THE DEPARTMENT

RESPECTED FACULTY MEMEBERS WHO ARE PURSUING FOR Ph.D

The faculty members of our department are always very eager for continuous evolution in their teaching process and to enhance this, they always try to improve their knowledge and teaching skill. Our patron Dr. Dipankar Sarkar is always helping all the faculty members for their own betterment in the field of knowledge. So, with his inspiration and mind-blowing ideas, we, the faculty members of the department of electronics and communication engineering are always trying to go beyond our knowledge and comfort zone.

Faculty Name	Department	Course	Institute	Enrollment Number	Session
Mr. Anirban Basu	ECE	Ph.D.	NIT, MZ	DT20EC020	2021
Mr. Prithick Saha	ECE	Ph.D.	NIT, Patna	203287	2021

Some Project Ideas Carried Out by Students

- ▶ Smart Auto billing shopping cart
- ▶ Optimized Design of Wide Band Polarization Diversified Microstrip Antenna Transponder for Satellite Communication

Chief Patron: Dr. Dipankar Sarkar
Editor-In-Chief: Mr. Supratim Roy
Student Member: Subhrakanti Bose
Anusuya Saha
Gopal Kundu



PUBLICATIONS OF THE DEPARTMENT

PUBLICATIONS BY OUR RESPECTED FACULTY MEMBERS

- ▶ Sujit Majumdar; Sudip Mandal, PhD; Rajiv Singh; Samik Chakraborty; Debasish Roy, “Modeling and Optimization of Grinding Process using Flower Pollination Algorithm”, Journal of Intelligent Manufacturing (JIMS), (Springer Journals), Communicated, Oct 25, 2020.
- ▶ Majumdar. S., Das. P., Kumar. S., D. Roy. & Chakraborty S., “Evaluation of cutting fluid application in surface grinding”, Published in Measurement, Elsevier, (SCI), 13 September 2020, DOI: <https://doi.org/10.1016/j.measurement.2020.108464>, Measurement 169 (2021) 108464.
- ▶ Sujit Majumdar, Ahin Banerjee, Debasish Roy, Samik Chakraborty, “A CFD Analysis of the Air Flow Around a Grinding Wheel”, Published in Journal of The Association of Engineers, India [ISSN 0368-1106], Vol 89, No 3-4 (2019), Pagination: 10-16 , May 8, 2020, DOI:10.22485/jaei/2019/v89/i3-4/194807.

PUBLICATIONS BY OUR STUDENTS

- ▶ Optimized the Bending Angle for Minimize Coupling Effect between Two Microstrip Transmission lines for RF IC Design by Faez Ahmed Khan, Debasis Roy, Arijit Chowdhury, Biprajit Acharjee, Samik Chakraborty at URSI RCRS 2020, IIT(BHU), Varanasi, India, 12-14 February, 2020
- ▶ Optimized design of wideband polarized diversified compact microstrip antenna transponder for satellite communication by Swarnodipto Ghosh, Ayona Chakraborty, Samik Chakraborty at Microwave and Optical Technology Letters, Under Review



OUR ALUMNI ACHIEVEMENTS

Saikat Roy

Recently joined Wolters Kluwer as a Senior Product Software Engineer.



Lahari Basu

Recently joined Cerner Corporation as a Senior Test Automation Engineer. Also, she completed her MBA in Finance from IISWBM, Kolkata.



Tabish Javed

Completed Executive MBA from Narsee Monjee Institute of Management Studies. Currently he is working as an Assistant Consultant in Tata Consultancy Service.



Bhaskar Chakraborty

Completed his MBA from Maastricht School of Management (Maastricht University). He is also working as a Senior Manager – Europe, Middle-East & Africa, UBER, Amsterdam.



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